

# **SPECTRUM<sup>®</sup>**

## **CyberSWITCH Devices (200 Series and 400) Management Module Guide**

**CABLETRON**  
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The Complete Networking Solution™

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# Preface

Use this guide as a reference for the SPECTRUM CyberSWITCH Devices (200 Series and 400) management software. Before using this guide, you should be familiar with SPECTRUM's functions and navigational techniques as described in the ***Administrator's Reference*** and the ***Operator's Reference***. Also become familiar with any network management and hardware requirements described in the CyberSWITCH hardware documentation.

For the purposes of this guide, CyberSWITCH is referred to as "device."

## What Is in This Guide

The following chapter descriptions outline the organization of the ***CyberSWITCH Devices (200 Series and 400) Management Module Guide***:

Chapter	Description
Chapter 1 <i>Introduction</i>	Describes the device, the management module software, and the model types.
Chapter 2 <i>Device Views</i>	Describes the Device views representing the device.
Chapter 3 <i>Configuration Views</i>	Describes the Configuration views for the device and the network information provided by the views.
Chapter 4 <i>Event and Alarm Messages</i>	Lists and explains the alarm and event messages generated in the Event Log or Alarm Manager for the device model type.
Chapter 5 <i>Application View</i>	Describes the Application view and the application specific information for the device.

## Conventions

This guide uses the following conventions:

- Menu selections and buttons referenced in text appear in **bold**; for example, **Configuration** or **Detail**.
- Button names appear in shadowed boxes when introducing paragraphs describing their use; for example:

**Help**

- Menu navigation appears in order of selection; for example, **Icon Subviews -> Utilities -> Application**.
- Referenced chapter titles and section headings appear in *italics*.
- Referenced documents appear in ***bold italics***.
- Hypertext links are in blue for online documents.
- CyberSWITCH is referred to as “device.”

## Related SPECTRUM Documentation

When using this guide, you should have a clear understanding of SPECTRUM functionality and navigation techniques as described in the following recommended documentation:

***Operator’s Reference***

***Administrator’s Reference***

***Report Generator User’s Guide***

***Application View Reference***

***Getting Started with SPECTRUM 4.0 for Operators***

***Getting Started with SPECTRUM 4.0 for Administrators***

***How to Manage Your Network with SPECTRUM***

This guide also references the following documents:

***SPECTRUM Portable Management Application Tools Guide***

***Routing Services Management Module Guide***

***DLM Management Module Guide***

## Other Related Documentation

Refer to the following documentation for more information on managing TCP/IP-based networks:

Martin, James, Kathleen Kavanagh Chapman, and Joe Leben. ***Local Area Networks: Architectures and Implementations***, 2d ed. Englewood Cliffs, NJ: Prentice Hall, 1994.

Michael, Wendy H., William J. Cronin, Jr., and Karl F. Piper. ***FDDI: An Introduction to Fiber Distributed Data Interface***. Woburn, MA: Digital Press, 1992.

Rose, Marshall T. ***The Simple Book: An Introduction to Management of TCP/IP-based Internets***. Englewood Cliffs, NJ: Prentice Hall, 1991.

Stallings, William. ***Data and Computer Communications***, 4th ed. New York: Macmillan Publishing Company, 1994.

Tanenbaum, Andrew S. ***Computer Networks***, 3d ed. Englewood Cliffs, NJ: Prentice Hall, 1996.





# Chapter 1

## Introduction

---

### What Is in This Chapter

This chapter introduces the SPECTRUM management modules for the CyberSWITCH Devices (200 Series and 400). It describes the following:

- *CyberSWITCH Devices*
- *SPECTRUM Model Types*
- *Accessing SPECTRUM Views*
- *Roadmap of SPECTRUM Views*
- *SPMA Support*

### CyberSWITCH Devices

The CyberSWITCH 200 series is a standalone LAN to WAN remote access solution. Designed as an end node device, it supports one to twelve users with connectivity to a corporate site or central office through a WAN Leased Line.

The CyberSWITCH 400 is a LAN to WAN remote access switch and gateway device with Ethernet support. It provides an access node for both the large regional and corporate office or any other location requiring a “backbone” dedicated WAN solution. The CyberSWITCH 400 supports a large workgroup comprised of several types of information-critical employees who require remote attachment to corporate networks, specifically, corporate hubs or large branch offices. It also provides the connectivity for PPP and Frame Relay leased lines, allowing it to support a large number of remote connections for employees who need quick access to information resources.

## SPECTRUM Model Types

The model type refers to the management module software package used to specify attributes, actions, and associations for the physical device using the Simple Network Management Protocol (SNMP) and Management Information Bases (MIBs). The model types for the CyberSWITCH are:

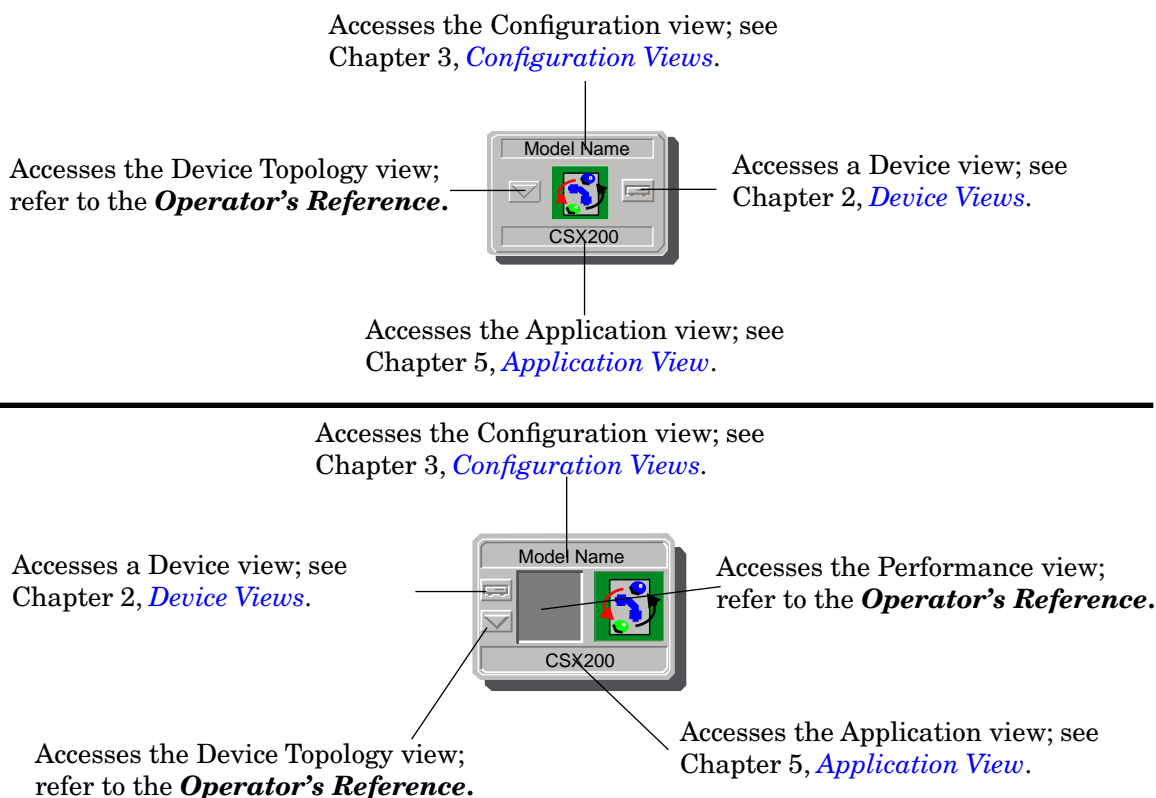
- CSX200 for the CyberSWITCH 200 series
- CSX400 for the CyberSWITCH 400

Refer to the *Administrator's Reference* for modeling instructions.

## Accessing SPECTRUM Views

Icons provide access to SPECTRUM views that display device-specific information. Access these views through double-click zones ([Figure 1-1](#)) and Icon Subviews menus ([Figure 1-2](#) and [Figure 1-3](#)).

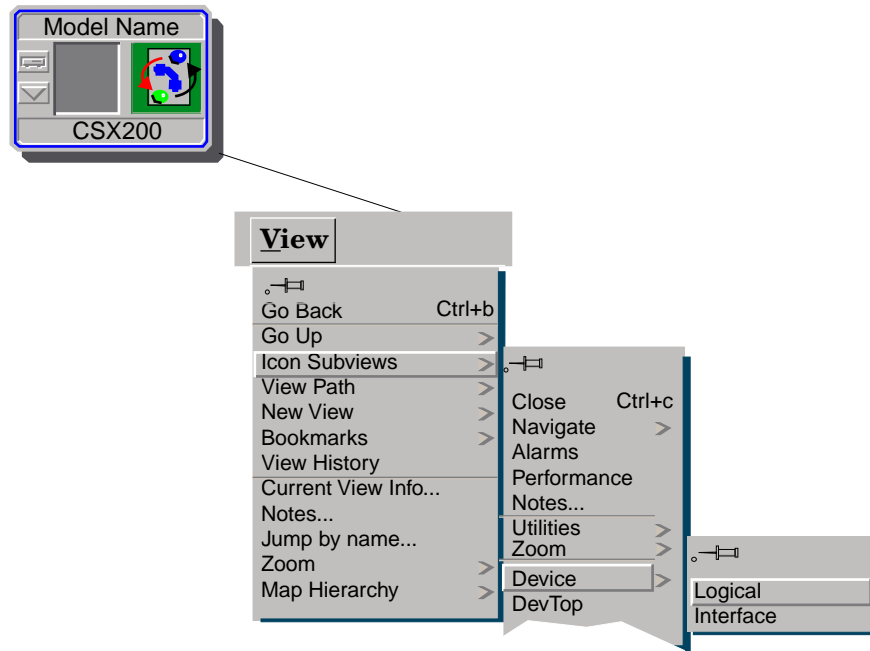
**Figure 1-1. Using Double-Click Zones to Access SPECTRUM Views**



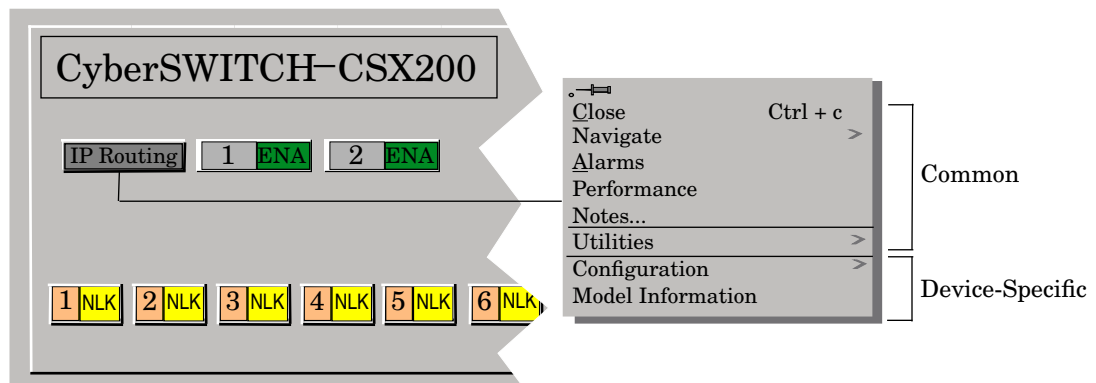
To access the Icon Subviews menu as shown in [Figure 1-2](#) and [Figure 1-3](#), do the following:

1. Highlight the icon or label.
2. From the View menu, select **Icon Subviews**, or click and hold the applicable mouse button (middle or right) over the icon or label. Refer to the *Operator's Reference* for information on configuring your mouse.

**Figure 1-2. Accessing Icon Subviews Menus from the Device Icon**



**Figure 1-3. Accessing Icon Subviews Menus from Labels**

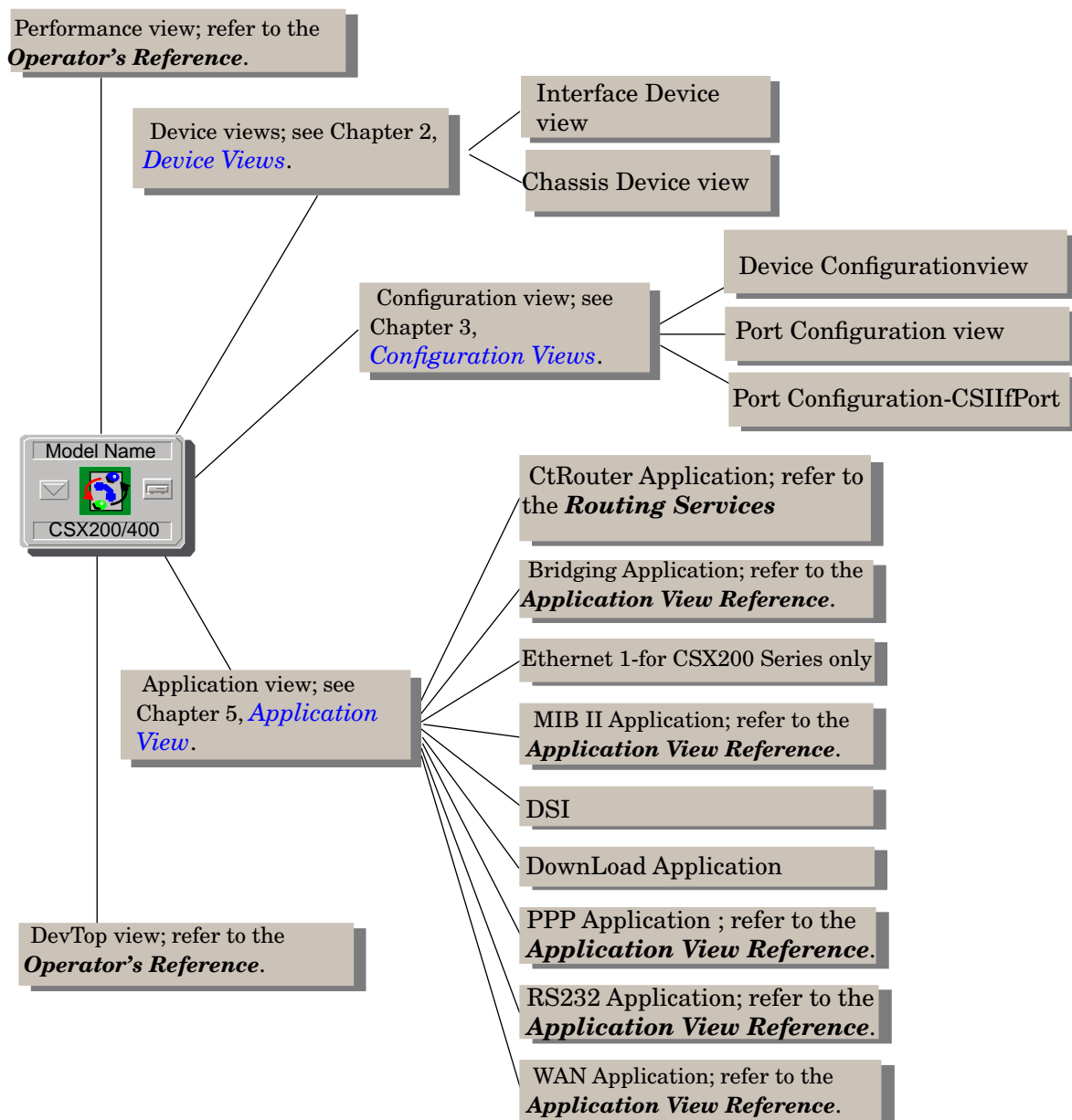




## Roadmap of SPECTRUM Views

Figure 1-4 shows a “roadmap” of the SPECTRUM views for this device. These views are accessible from double-click zones (Figure 1-1) and Icon Subviews menus (Figure 1-2 and Figure 1-3).

**Figure 1-4. SPECTRUM Views Roadmap**



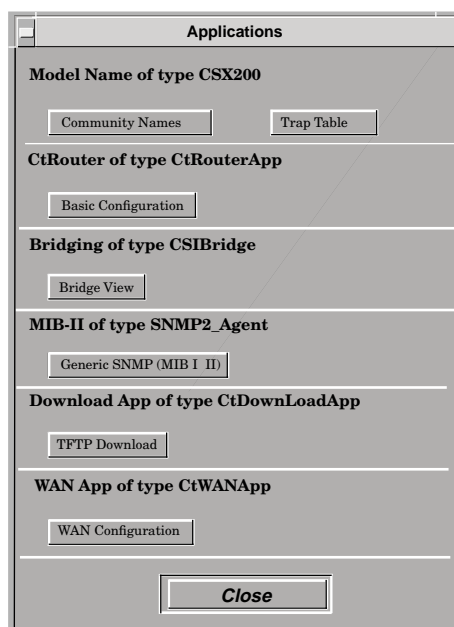
## SPMA Support

SPECTRUM also supports the SPECTRUM Portable Management Application (SPMA) functionality for the CyberSWITCH devices. To open the SPMA Applications view from any SPECTRUM view, do the following:

1. Highlight the Device icon.
2. From the View menu, select **Icon Subviews -> Utilities -> Applications**.

Figure 1-5 shows an example of an SPMA Applications view.

**Figure 1-5. SPMA Applications View**



The SPMA views are described in the *SPECTRUM Portable Management Application Tools Guide*.





## Chapter 2

# Device Views

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## What Is in This Chapter

This chapter describes the following Device views and subviews available for the CyberSWITCH Devices:

- *Chassis Device View*
- *Interface Device View*

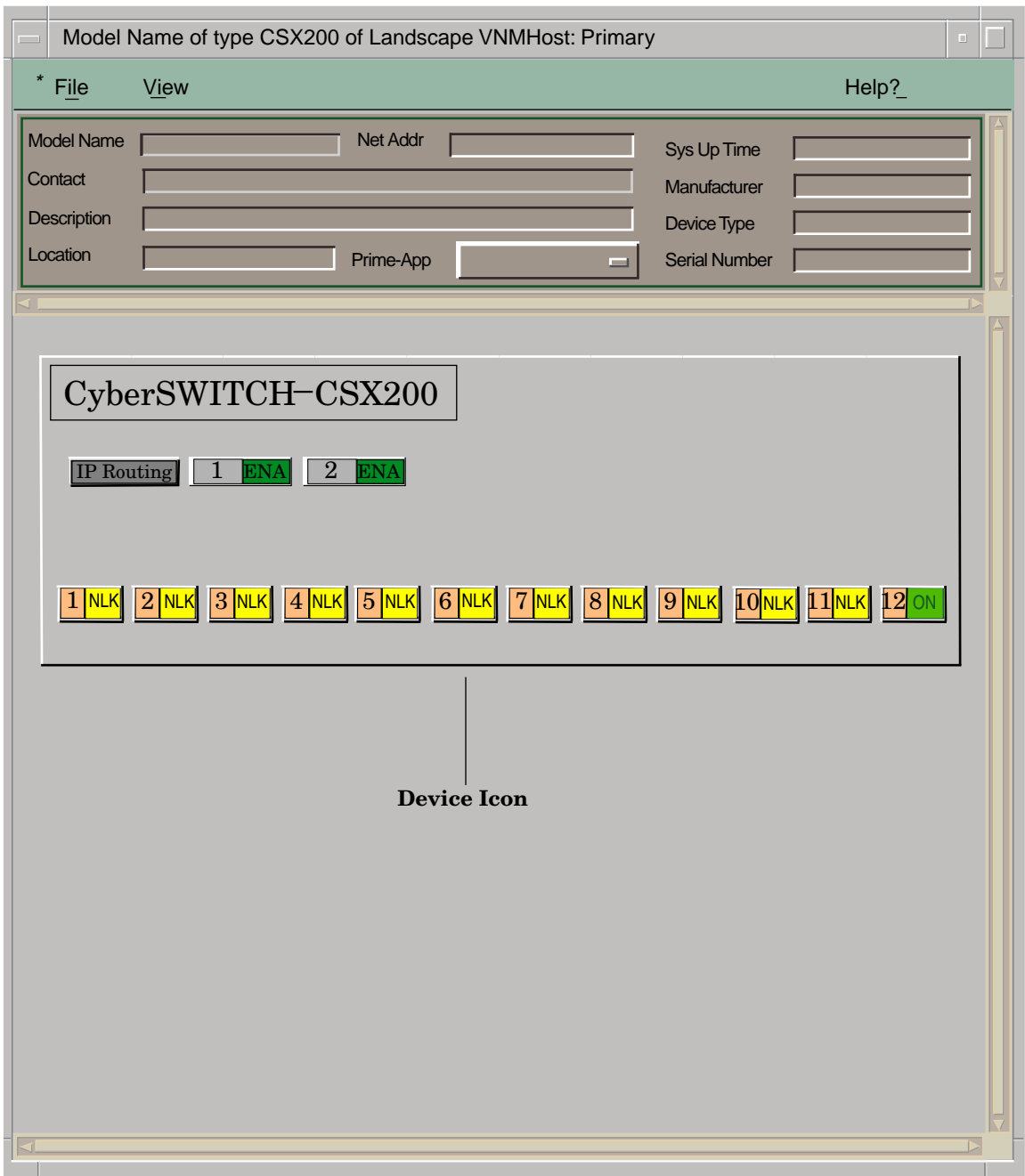
See Chapter 1, *Introduction*, for information on *Accessing SPECTRUM Views*.

## Chassis Device View

This view (accessible from the device icon) is a logical representation of the physical CyberSWITCH Devices (200 Series and 400). The Chassis Device view provides menu and double-click zone access to the views that monitor the devices and their interfaces and ports.

[Figure 2-1](#) shows an example of the Chassis Device view for the CyberSWITCH 200 Series. [Figure 2-2](#) shows an example of the Chassis Device view for the CyberSWITCH 400.

**Figure 2-1. Chassis Device View for the CSX200 Series**



**Figure 2-2. Chassis Device View for the CSX400**

Model Name of type CSX400 of Landscape VNMHost: Primary

\* File View Help?

Model Name  Net Addr  Sys Up Time

Contact  Manufacturer

Description  Device Type

Location  Prime-App  Serial Number

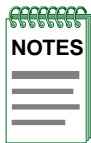
CyberSWITCH-CSX400

IP Routing	1 DIS	2 DIS	3 DIS	4 DIS	5 DIS	6 DIS	7 DIS	8 DIS	9 DIS	10 DIS	11 DIS
12 DIS	13 DIS	14 DIS	15 DIS	16 DIS	17 DIS	18 DIS	19 DIS	20 DIS	21 DIS	22 DIS	23 DIS
24 DIS	25 DIS	26 DIS	27 DIS	28 DIS	29 DIS	30 DIS	31 DIS	32 DIS	33 DIS	34 DIS	35 DIS
36 DIS	37 DIS	38 DIS	39 DIS	40 DIS	41 DIS	42 DIS	43 DIS	44 DIS	45 DIS	46 DIS	47 DIS
48 DIS	49 DIS	50 DIS									

Device Icon

Device Icon

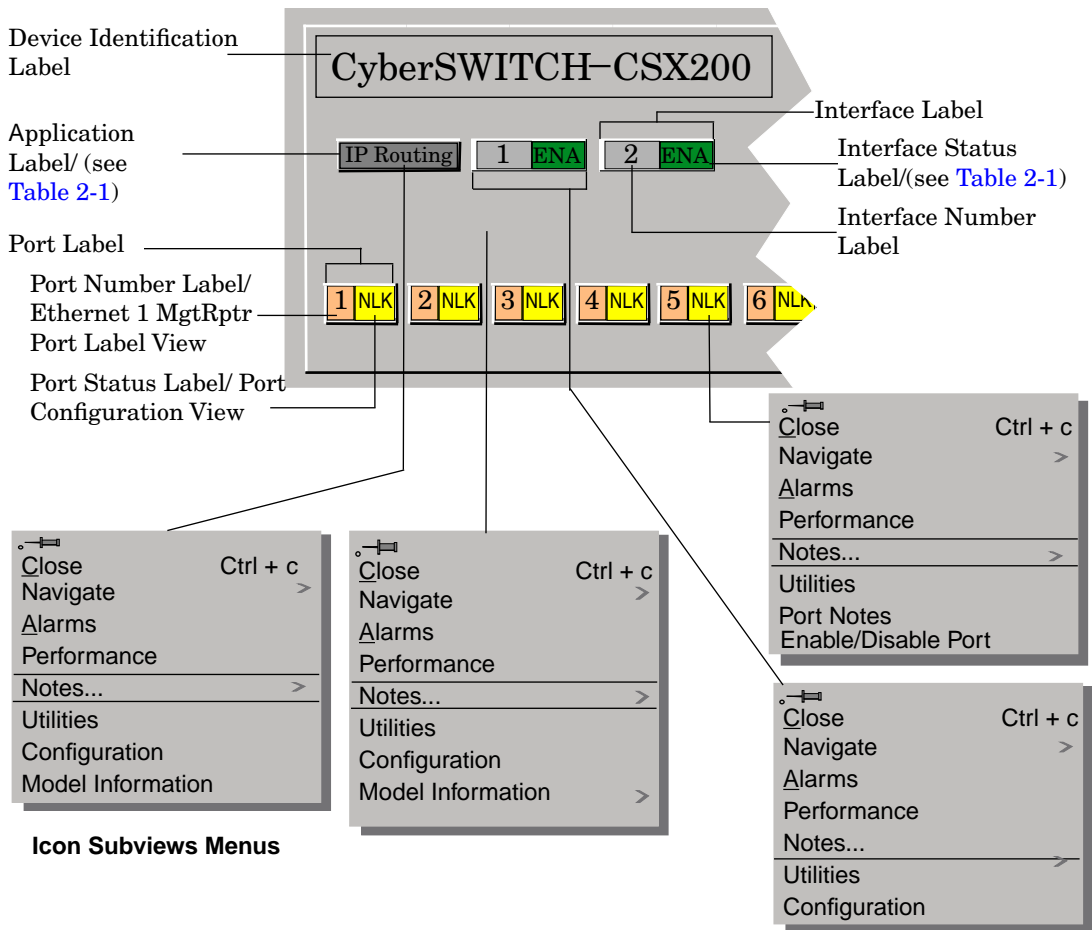
This icon is a logical representation of the physical device and its interfaces and/or ports. This section describes the information available from the Device icon. [Figure 2-3](#) shows a detailed example of a CSX200 Series Device icon. The CSX400 Device icon has the Application and Interface Labels but no Port Labels.



The callouts displayed in the illustration below identify the labels and, when applicable, the views to which they provide double-click access. The views to which the Application Label and the Interface Status Label have double-click access depend upon the application selected from the **Application Display** choice on the Icon Subviews menu. [Table 2-1](#) lists the accessible views.

The menus displayed in the illustration are the Icon Subviews menus for those labels on the Device icon.

Figure 2-3. Device Icon



## Views with Double-Click Access

The view displayed depends upon the application selected. To select an application, do the following:

1. Highlight the Device icon.
2. From the View menu, select **Icon Subviews -> Application Display**.

[Table 2-1](#) lists the views that are accessible from the Application Label and the Interface Status Label for the application selected.

**Table 2-1. Views with Double-click Access**

Application	View from Application Label	View from Interface Status Label
Physical	None	CSIIIf Port Performance View described in the <i><b>Operator's Reference</b></i>
CtRouter	Router System Table - CtRouter described in the <i><b>Routing Services Management Module Guide</b></i>	CtRouter Performance View described in the <i><b>Routing Services Management Module Guide</b></i>
IP Routing	IP Routing System Configuration View described in the <i><b>Routing Services Management Module Guide</b></i>	IP Routing Performance View described in the <i><b>Routing Services Management Module Guide</b></i>
IP RIP	IP RIP Interface Configuration View described in the <i><b>Routing Services Management Module Guide</b></i>	IP RIP Performance View described in the <i><b>Routing Services Management Module Guide</b></i>
IPX Routing	IPX Routing System Configuration View described in the <i><b>Routing Services Management Module Guide</b></i>	IPX Routing Performance View described in the <i><b>Routing Services Management Module Guide</b></i>
IPX RIP	IPX RIP Interface Configuration View described in the <i><b>Routing Services Management Module Guide</b></i>	IPX RIP Performance View described in the <i><b>Routing Services Management Module Guide</b></i>



**Table 2-1. Views with Double-click Access (Continued)**

Application	View from Application Label	View from Interface Status Label
IPX SAP	IPX SAP Interface Configuration View described in the <i><b>Routing Services Management Module Guide</b></i>	IPX SAP Performance View described in the <i><b>Routing Services Management Module Guide</b></i>
Bridging	CSI Bridge Interface Performance View described in the <i><b>Operator's Reference</b></i>	None

## Device Icon Labels

This section describes the labels on the Device Icon, where applicable lists the Icon Subviews menus to which the labels provide access, and identifies the views to which the labels provide double-click access.

### Device Identification Label

This label identifies the model with which you are working, the 200 series or the 400.

### Device Icon Subviews Menu

[Table 2-2](#) lists the device-specific Device Icon Subviews menu selections available for this device. See Chapter 1, [Introduction](#), for information on [Accessing SPECTRUM Views](#).

**Table 2-2. Device Icon Subviews Menu**

Menu Selection	Description
Configuration	Opens the Device Configuration view described in Chapter 3, <a href="#">Configuration Views</a> .
Model Information	Opens the Model Information view described in the <i><b>Operator's Reference</b></i> .

**Table 2-2. Device Icon Subviews Menu (Continued)**

Module Notes	Opens a dialog box in which you can record notes if you have write permission for the model.
Application Display	Opens the Application Display submenu, allowing you to choose Physical (MIB II), Bridging, or one of the following router applications described in the <b><i>Routing Services Management Module Guide</i></b> : CtRouter, IP Routing, IP RIP, IPX Routing, IPX RIP, IPX SAP.

## Application Label

This label provides access to the Icon Subviews menu for the application displayed (see [Figure 2-3](#)). Double-click the Application label to open the System Configuration - IP Routing view described in the ***Routing Services Management Module Guide***. The application selected determines the information displayed and the menu selections available. To select the application, highlight the Device icon and from the View menu, select **Icon Subviews -> Application Display**.

[Table 2-3](#) lists the device-specific Bridging Application Icon Subviews menu selections. [Table 2-4](#) lists the Router Application Icon Subviews menu selections. See Chapter 1, [Introduction](#), for information on [Accessing SPECTRUM Views](#). The Physical Application has no specific Icon Subviews menu selections.

**Table 2-3. Bridging Application Icon Subviews Menu**

Menu Selection	Description
Bridge Performance	Opens the Bridge Performance view described in the <b><i>Operator's Reference</i></b> .
Bridge Detail	Opens the Bridge Detail view described in the <b><i>Operator's Reference</i></b> .
Bridge Model Information	Opens the Model Information view described in the <b><i>Operator's Reference</i></b> .
Special Database	Opens the Ethernet Special Database Table with Filter Information Table.
Spanning Tree Information	Opens the Spanning Tree Information view described in the <b><i>Application View Reference</i></b> .
Static Database Table	Opens the Static Database Table view described in the <b><i>Application View Reference</i></b> .
Transparent Bridge Info	Opens the Transparent Bridge Information view with Forwarding Database and Port Tables described in the <b><i>Application View Reference</i></b> .

**Table 2-4. Router Applications Icon Subviews Menu**

Menu Selection	Description
Configuration	Opens a submenu with access to various routing tables described in the <i><b>Routing Services Management Module Guide</b></i> .
Model Information	Opens the Model Information view described in the <i><b>Operator's Reference</b></i> .
Basic Configuration	Available only for the CtRouter Application. Opens a window to allow you to configure the routing services in your Cabletron device.

## Interface Labels

These labels represent the interfaces located on the front panel of the device. They provide access to an Icon Subviews menu and display two information labels: an Interface Number Label and an Interface Status Label. The Icon Subviews menu selection for the Interface label is **Configuration**. It opens the Configuration dialog box, which allows you to enable or disable the selected port. See Chapter 1, *Introduction*, for information on *Accessing SPECTRUM Views*.

### Interface Number Label

This label displays the interface number (see *Figure 2-3*).

### Interface Status Label

This label displays the status of the port. See *Application Label*, described previously in this chapter, for information on selecting the application to be displayed.

Double-click this label to open the following views:

- for the Physical Application, the CSIIIfPort Performance view. Refer to the ***Operator's Reference*** for a description of Performance views.
- for the Routing Applications, one of the Routing Performance views. Refer to the ***Routing Services Management Module Guide*** for a description of these Performance views.

*Table 2-5*, *Table 2-6*, and *Table 2-7* describe the possible states relative to the application selected.

**Table 2-5. Interface Status for the Physical or MIB II Application**

Color	Status	Description
Green	ON	Port is operational; Operational Status is up.
Blue	OFF	Port is off; Operational Status is down.
Gold	OFF	Port is off; Operational Status is up.
Yellow	TST	Port is in the test mode; Operational Status is up.
Red	TST	Port is in the test mode; Operational Status is down.

**Table 2-6. Interface Status for the Bridging Application**

Color	Status	Description
Green	FWD	Bridge port is forwarding.
Blue	DIS	Port is disabled.
Magenta	LST	Bridge is in the listening mode.
Magenta	LRN	Bridge is in the learning mode.
Orange	BLK	Bridge port is in the blocking mode.
Red	BRK	Bridge port is broken.
Blue	UNK	The status is unknown.

**Table 2-7. Interface Status for the Routing Applications**

Color	Status	Description
Green	ENA	Port is enabled.
Gray	DIS	Port is disabled.
Blue	Other	None.

## Port Labels - CSX200 Series only

These labels represent the Ethernet repeater ports. They display two information labels: a Port Number Label and a Port Status Label.

### Port Number Label

This label displays the port number. Double-click this label to open a dialog box, the Notes for Ethernet 1 MgtRptrPort View. The Notes view attaches a message to a model or port. You must have write privileges to a model to enter notes. Refer to the ***Operator's Reference*** for more information.

### Port Status Label

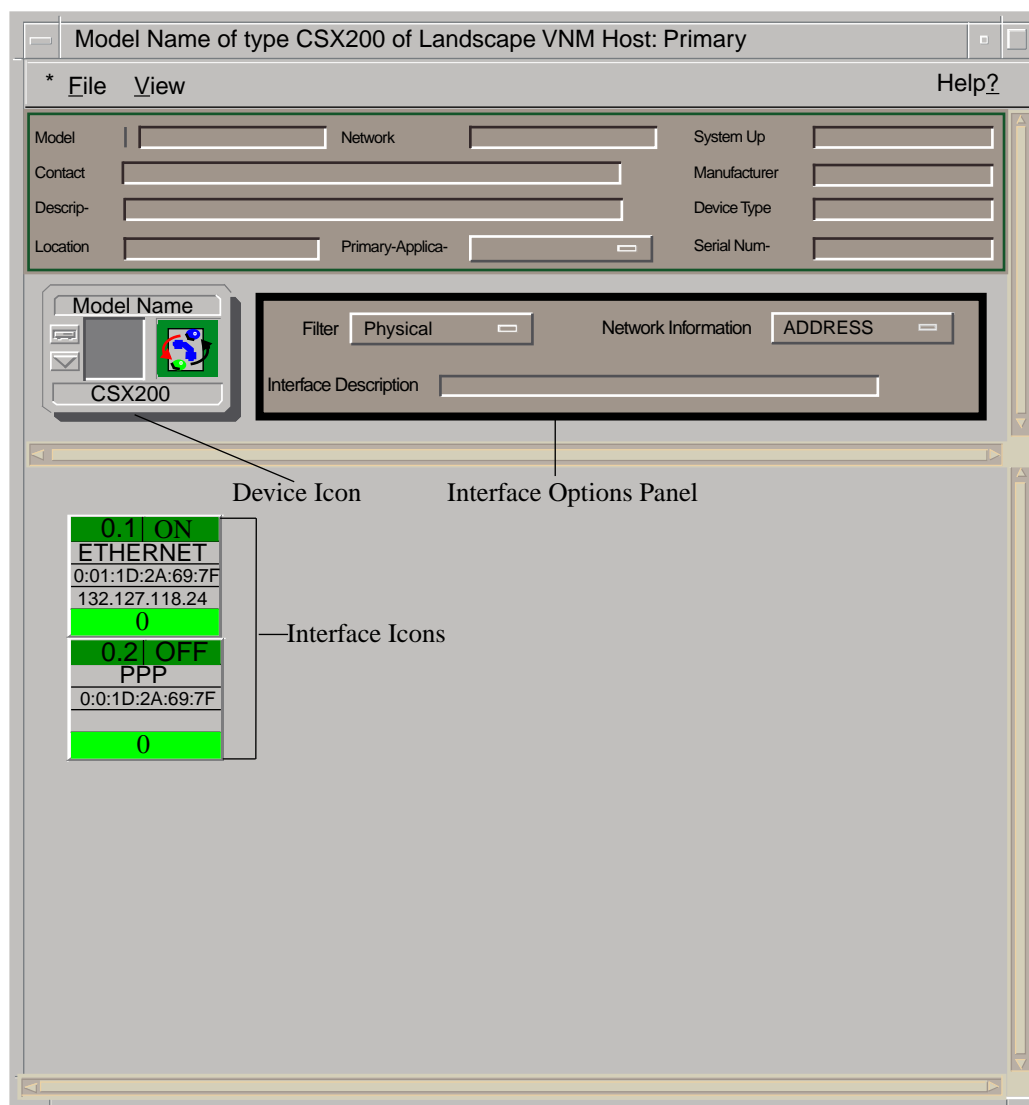
This label displays the status of this port. Double-click this label to open the Port Configuration View. See Chapter 3, *[Configuration Views](#)*, for more information on this view. [Table 2-8](#) shows the possible states of the port.

**Table 2-8.** Port Status and Descriptions

Color	State	Description
Green	ACT	The module is connected and active.
Blue	OFF	The module is not connected.
Yellow	CON	The module is connecting.

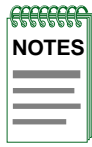
## Interface Device View

This section describes the Interface icons displayed in the Interface Device view (accessible from the device icon) and the Interface Options panel. This view provides dynamic configuration and performance information for each interface on this device. If the configuration changes, SPECTRUM modifies the Device view after the next polling cycle to reflect the new configuration. This view also provides a Device icon which allows you to monitor the device operation and access other device-specific views. [Figure 2-4](#) shows an example of the Interface Device view.

**Figure 2-4. Interface Device View**

## Interface Icon

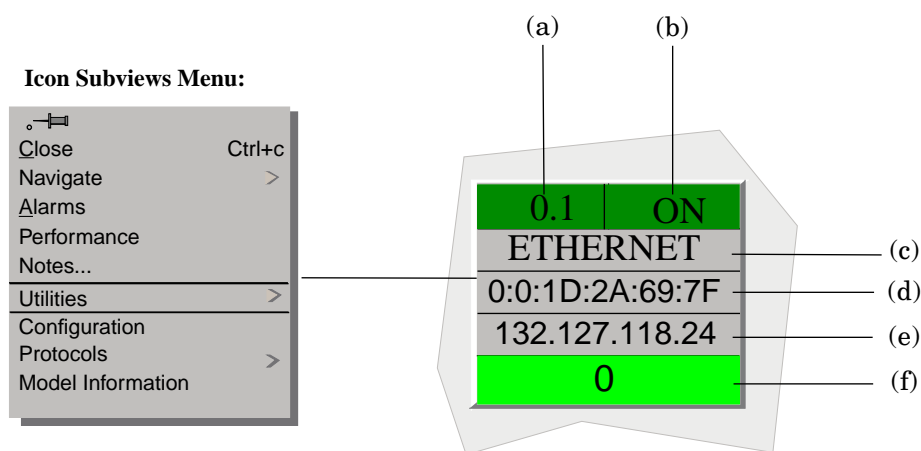
These icons represent the interfaces or ports of the device. The icons identify the type of interface or port and provide statistical information. [Figure 2-5](#) shows an example of an interface icon, its Icon Subviews menu, and its labels/double-click zones.



The callouts (a through f) displayed in the illustration below identify the label and the view to which it provides double-click access. Example: Administrative Status Label/Port Configuration CSIIIfPort View displays the status of this interface and provides double-click access to the Port Configuration CSIIIfPort view.

The Icon Subviews menu displayed in the illustration is specific to the icon selected.

**Figure 2-5. Interface Icon**



- a. *Interface Label*
- b. *Administrative Status Label/Port Configuration - CSIIIfPort View*
- c. *Interface Type Label*
- d. *MAC Address Label / CSI Interface Port Model Information View*
- e. *Network Information Label / Network Information Dialog Box*
- f. *Gauge Label / Performance - CSIIIfPort View*

## Interface Icon Labels

This section describes the labels on the Interface Icon and identifies the views to which the labels provide double-click access.

## Interface Label

This label displays the interface number.

## Administrative Status Label

This label displays the status of this interface. Double-click this label to open the [Port Configuration - CSII/Port View](#), described on Page 3-4. To select the application to be displayed (Physical, Bridging, or one of the Router applications), click the **Filter** menu button in the Interface Options Panel. See the [Interface Options Panel](#) described on Page 2-14 for more information on the Filter menu button. [Table 2-9](#), [Table 2-10](#), and [Table 2-11](#) list the possible states relative to the application selected.

**Table 2-9. Administrative Status for the Physical or MIB II Application**

Color	Status	Description
Green	ON	Port is operational; Operational Status is up.
Blue	OFF	Port is off; Operational Status is down.
Gold	OFF	Port is off; Operational Status is up.
Yellow	TST	Port is in the test mode; Operational Status is up.
Red	TST	Port is in the test mode; Operational Status is down.

**Table 2-10. Administrative Status for the Bridging Application**

Color	Status	Description
Green	FWD	Bridge port is forwarding.
Blue	DIS	Port is disabled.
Magenta	LST	Bridge is in the listening mode.
Magenta	LRN	Bridge is in the learning mode.
Orange	BLK	Bridge port is in the blocking mode.
Red	BRK	Bridge port is broken.
Blue	UNK	The status is unknown.



**Table 2-11. Administrative Status for the Routing Applications**

Color	Status	Description
Green	ENA	Port is enabled.
Gray	DIS	Port is disabled.
Blue	Other	None.

## Interface Type Label

This label displays the interface type.

## MAC Address Label

This label displays the physical (MAC) address of the CyberSWITCH Device interface. Double-click this label to open the CSI Interface Port Model Information View.

## Network Information Label

This label displays user-selectable network information (Address, Name, or Mask). The default is Address. To change this label's display, use the Interface Options Panel, described later in this chapter. Double-click the label to open the Network Information Panel, which displays the Name, Address, and Mask.

## Gauge Label

This label displays the performance statistic determined by the Gauge Control Panel for this interface. See [Gauge Control Panel](#) described on Page 2-15 for more information. Double-click this label to open the Performance view described in the ***Operator's Reference***.

## Interface Options Panel

This area of the Interface Device view allows you to modify the presentation of a highlighted Logical Interface icon. Double-click a non-text area of this panel to open the Gauge Control Panel view, described later in this section. The Interface Options panel provides the following information:

**Filter**

This menu button allows you to select the application to be displayed by the interface icons. You can select Physical (MIB II), Bridging, or one of the Router applications. Refer to the ***Routing Services Management Module Guide*** for more information on routing applications.

**Network Information**

This menu button allows you to select the kind of information displayed in the Network Information Label of the highlighted icon. Possible selections are: ADDRESS, NAME or MASK.

**Interface Description**

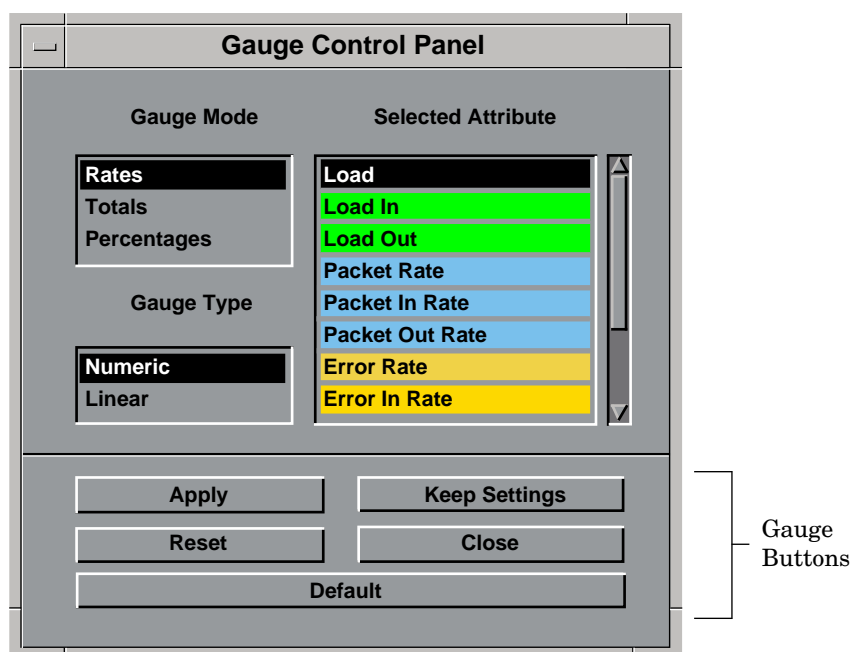
This field describes the highlighted interface. If no interface is highlighted, this field is empty.

## Gauge Control Panel

This panel ([Figure 2-6](#)) allows you to change the type of statistical information displayed on the Gauge label of the Interface icon. To access the Gauge Control Panel, double-click the background of the Interface Options panel or do the following:

1. Highlight the Interface Options panel.
2. From the View menu, select **Icon Subviews -> Gauge Control Panel**.

**Figure 2-6.** Gauge Control Panel



The Gauge Control Panel provides the following information:

- Gauge Mode
- Selected Attribute
- Gauge Type
- Gauge Buttons

**Gauge Mode**

This area allows you to select the type of information shown on the Gauge Label of the Interface icon: Rates, Totals, or Percentages. The Percentages selection is not yet implemented.

The color displayed on the Gauge Label depends upon the particular mode and statistical attribute selected. [Table 2-12](#) and [Table 2-13](#) respectively provide a list of attributes and their corresponding colors for the Rates mode and the Totals mode.

**Table 2-12. Rates Gauge Mode: Attributes and Corresponding Colors**

<b>Selected Attribute</b>	<b>Color</b>
Load	Green
Load In	Green
Load Out	Green
Packet Rate	Blue
In Packet Rate	Blue
Out Packet Rate	Blue
% Discard	Tan
% Filtered	Gray
% Forwarded	Violet
%Host Bound	Yellow
%Error	Orange
% Transmitted	White

**Table 2-13. Totals Gauge Mode: Attributes and Corresponding Colors**

<b>Selected Attribute</b>	<b>Color</b>
Errors	Orange
In Packets	Blue
Out Packets	Blue
In Octets	Green
Out Octets	Green
Discards	Tan
Forwarded	Violet
Host Bound	Yellow
Transmitted	White
Filtered	Gray

**Selected Attribute**

This area allows you to select the statistical attribute displayed on the Interface icon's Gauge label. The label changes color to reflect the attribute selected.

**Gauge Type**

This option allows you to select either a numeric or linear display on the Gauge label.

### **Gauge Buttons**

The following describes the Gauge buttons:

#### **Apply**

Applies the current settings to the Gauge label temporarily but does not save the settings.

#### **Reset**

Returns the settings to the previously saved values.

#### **Keep Settings**

Saves the current settings while SpectroGRAPH is running. The settings return to default when you restart SpectroGRAPH.

#### **Close**

Closes the Gauge Control Panel.

#### **Default**

Returns the settings to the SPECTRUM default.



## Chapter 3

# Configuration Views

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## What Is in This Chapter

This chapter describes the following Configuration views available for the CyberSWITCH Devices:

- *Device Configuration View*
- *Port Configuration - CSII/Port View*
- *Port Configuration View - for the CSX200 Series only*
- *Repeater Configuration View - for the CSX200 Series only*

These views display network configuration and operating status as well as network traffic flow and error rates.

See Chapter 1, *Introduction*, for information on *Accessing SPECTRUM Views*.

Refer to ***SPECTRUM Application View Reference*** for descriptions of the following Configuration views available for the CyberSWITCH Devices:

- Point-to-Point Protocol (PPP) Bridge Configuration Table
- Internet Protocol (IP) Configuration view
- System Configuration view
- PPP Link Control Protocol (LCP) Application Configuration view
  - PPP Link Status Configuration Table - Local to Remote Configuration
  - PPP Link Status Configuration Table - Remote to Local Configuration
- Digital Signaling 1 (DS1) Configuration Table

To access these views, do the following:

1. Within the Application view, highlight the appropriate icon.
2. From the Icon Subviews menu:
  - of the PPP\_Bridge icon, select **Configuration**;
  - of the System icon, select **Configuration**;
  - of the PPP LCP icon, select **Configuration**;
  - of the IP icon, select **IP Configuration**;
  - of the DS1 icon, select **DS1 Configuration Table**.

## Device Configuration View

This view (accessible from the device icon) provides the following configuration and operating status of this device.

### Device Configuration Information

This section of the Configuration view provides device-specific information.

#### Contact Status

Indicates the establishment of a connection with the device.

The view also provides the following SPMA view buttons which allow you to configure this device. Refer to the ***SPECTRUM Portable Management Application Tools Guide*** for details on the views accessible from these buttons.

#### Component Table

Opens the Community Name window, which provides information on the CyberSWITCH Device components.

#### Download Application

Opens the TFTP Download view, which enables you to upgrade the firmware for a CyberSWITCH Device from a TFTP Boot or Bootp Server.

#### Trap Table

Opens the Trap Table, which allows you to set up your workstation to be notified of traps received and sent by the CyberSWITCH Device.

## Interface Configuration Table

This table within the Device Configuration view provides the following configuration information for the device and each interface:

### **Number of Interfaces**

Displays the number of interfaces available for this device.

### **Index**

Displays the interface number.

### **Description**

Displays a description of the interface.

### **Type**

Displays the type of hardware interface for the port.

### **Bandwidth**

Displays the estimated bandwidth of the interface measured in bits per second. For interfaces that do not vary in bandwidth or when no accurate estimate can be made, displays a nominal bandwidth.

### **Physical Address**

Displays the MAC (physical) address of the port.

### **Operation Status**

Displays the current operational state of this port. Possible values are: On, Off, Test.

### **Admin Status**

This menu button allows you to enable or disable the port or place it in test mode. Possible selections are: On (Enable), Off (Disable), Test (Testing mode).

### **Last Change**

Displays the System uptime value when the interface entered its current operational state. The format is as follows: D + HH:MM:SS. For example, 1 + 20:40:25 indicates that the CyberSWITCH device has been active for one day and 20 hours, 40 minutes and 25 seconds.

### **Queue Length**

Displays the length of the outbound packet queue, in packets.

### **Packet Size**

Displays the largest packet that can be transmitted or received by the port, measured in octets.



## Interface Configuration View

Access this view from the Interface Configuration Table by double-clicking on any of the fields that represents port information. This view reiterates the information in the table but only for that single port or interface you chose by double-clicking on a field.

## Port Configuration - CSIIIfPort View

This view provides port configuration and operating status of the CyberSWITCH device and allows you to enable or disable the port selected.

To access this view, double-click the Administrative Status Label of the interface icon within the Interface Device view, or do the following:

1. Within the Interface Device view, highlight the Interface icon.
2. From the Icon Subviews menu, select **Configuration**.

This view displays the following information:

### **Interface Index**

Displays the numerical value identifying the interface or port.

### **Interface Type**

Displays the type of interface.

### **Operation Status**

Displays the current operating condition of the interface or port. Possible values are: On, Off, and Test.

### **Admin Status**

This menu button allows you to enable or disable the port or place it in test mode. Possible selections are: On (Enable), Off (Disable), and Test (Testing mode).

### **IF Description**

Provides a description of the interface.

## Port Configuration View - for the CSX200 Series only

This view provides port management information on the CyberSWITCH device and allows you to enable or disable the port selected.

To access this view, double-click the Port Status Label in the Chassis Device view, or do the following:

1. Within the Chassis Device view, highlight the Port icon.
2. From the Icon Subviews menu, select **Configuration**.

The view displays the following information:

### **Port Id**

Displays the numerical value identifying the port.

### **Administrative Status**

This menu button allows you to enable or disable the port or place it in test mode. Possible selections are: On (Enable), Off (Disable), Test (Testing mode).

### **Operational Status**

Displays the current operating condition of the port. Possible values are: Operational or Not-operational.

### **Segmentation Status**

Displays the segmentation status of the port. Possible values are: Segmented or Not-segmented.

### **Link Status**

Displays the current link status of the port. Possible values are: Linked or Not-linked.

## Repeater Configuration View - for the CSX200 Series only

This view provides repeater management information on the CyberSWITCH device.

To access this view, do the following:

1. Within the CSX200 Series Application view, highlight the Ethernet 1 icon.
2. From the Icon Subviews menu select **Configuration**.

The view displays the following information:

**Port Count**

Displays the number of ports including the internal repeater port.

**Ports On**

Displays the number of ports on or enabled.

**Ports Operational**

Displays the number of ports transferring packets.



## Chapter 4

# Event and Alarm Messages

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## What Is in This Chapter

This chapter lists the types of events and alarms generated by the CyberSWITCH Devices and provides any probable cause messages corresponding to these alarms.

## CyberSWITCH 200 Series and 400 Events and Alarms

Table 4-1 lists the SPECTRUM database directory paths (in bold) and the messages displayed for the Event Log and Alarm Manager when applicable.

**Table 4-1. CyberSWITCH 200 Series and 400 Events and Alarms**

<b>Message in the Event Log</b>	<b>Alarm Manager Probable Cause Message</b>
<b>CsEvFormat/ Event00010306</b>  {d “%w- %d %m-, %Y - %T”} - A(n) {t} device, named {m}, has been cold started. (event [{e}])	<b>No Probable Cause Message</b>
<b>CsEvFormat/Event00010307</b>  {d “%w- %d %m-, %Y - %T”} A(n) {t} device, named {m} has been warm started. (event [{e}])	<b>No Probable Cause Message</b>

**Table 4-1. CyberSWITCH 200 Series and 400 Events and Alarms (Continued)**

<b>Message in the Event Log</b>	<b>Alarm Manager Probable Cause Message</b>
<b>CsEvFormat/Event00010308</b>  {d "%w- %d %m-, %Y - %T"} A(n) {t} device, named {m}, has detected a communication Link Down. (event [{e}])	<b>CsPCause/Prob00010308</b>  Communication link is down.
<b>CsEvFormat/Event00010309</b>  {d "%w- %d %m-, %Y - %T"} A(n) {t} device, named {m}, has detected a communication Link Up. (event [{e}])	<b>No Probable Cause Message</b>
<b>CsEvFormat/Event0001030a</b>  {d "%w- %d %m-, %Y - %T"} A(n) {t} device, named {m}, has detected an Authentication Failure. (event [{e}])	<b>CsPCause/Prob0001030a</b>  Authorization failure. Other user is trying to connect to device with an invalid community string.
<b>CsEvFormat/Event0001030b</b>  {d "%w- %d %m-, %Y - %T"} A(n) {t} device, named {m}, has detected an EGP Neighbor Loss. EGP Neighbor IP address is {O 1}. (event [{e}])	<b>CsPCause/Prob0001030b</b>  Lost contact with EGP neighbor.
<b>CsEvFormat/Event00010810</b>  {d "%w- %d %m-, %Y - %T"} - RMON rising threshold trap received from model {m} of type {t}. AlarmIndex {I 1}, AlarmVariable {O 2}, AlarmSampleType {I 3}, AlarmValue {I 4} and AlarmRisingThreshold {I 5}. (event [{e}])	<b>CsPCause/Prob00010810</b>  Remote Monitor Rising Alarm Threshold Exceeded  This trap will be generated when the value of the trap exceeds the rising threshold for the alarm.
<b>CsEvFormat/Event00010811</b>  {d "%w- %d %m-, %Y - %T"} - RMON falling threshold trap received from model {m} of type {t}. AlarmIndex {I 1}, AlarmVariable {O 2}, AlarmSampleType {I 3}, AlarmValue {I 4} and AlarmFallingThreshold {I 5}. (event [{e}])	<b>CsPCause/Prob00010811</b>  Remote Monitor Falling Alarm Threshold Exceeded  This trap will be generated when the value of the trap exceeds the falling threshold for the alarm.

**Table 4-1. CyberSWITCH 200 Series and 400 Events and Alarms (Continued)**

<b>Message in the Event Log</b>	<b>Alarm Manager Probable Cause Message</b>
<b>CsEvFormat/Event00010812</b>  {d "%w- %d %m-, %Y - %T"} - RMON packet match trap received from model {m} of type {t}. Channel description: {S 3}. Channel had {I 2} matches. (event [{e}])	<b>CsPCause/Prob00010812</b>  Packet Match Trap  This trap will be generated when a packet is captured by a channel that is configured for sending SNMP traps.
<b>CsEvFormat/Event000d0001</b>  {d "%w- %d %m-, %Y - %T"} {m} of type {t} has reported a root change (event [{e}]).	<b>CsPCause/Prob000d0001</b>  This bridge has become the new root of the Spanning Tree.
<b>CsEvFormat/Event000d0002</b>  {d "%w- %d %m-, %Y - %T"} {m} of type {t} has reported a network topology change (event [{e}]).	<b>CsPCause/Prob000d0002</b>  A port has transitioned from the Learning state to the Forwarding state, or from the Forwarding state to the Blocking state.
<b>CsEvFormat/Event000d0101</b>  {d "%w- %d %m-, %Y - %T"} - Port {I 3} on module in slot {I 1} of {m} ({t}), has segmented. (event [{e}])	<b>CsPCause/Prob000d0101</b>  The port has made 32 consecutive attempts to transmit and which resulted in a collision each time or the port collision detector was turned on for longer than 2.4 milliseconds. Either of these collision occurrences are caused by a cabling problem of extremely high rates of traffic on the segment the port is attached to.
<b>CsEvFormat/Event000d0102</b>  {d "%w- %d %m-, %Y - %T"} - Port {I 3} on module in slot {I 1} of {m} ({t}), has unsegmented. (event [{e}])	<b>CsPCause/Prob000d0102</b>  The port has transmitted or received a valid packet. This can occur when a cable or termination fault has been corrected. Unsegmenting also can occur on a port that previously was not in use.
<b>CsEvFormat/Event000d0103</b>  {d "%w- %d %m-, %Y - %T"} - Network configuration change reported by {m} ({t}). Device linked to port {I 3} on module in slot {I 1}. (event [{e}])	<b>CsPCause/Prob000d0103</b>  A device supporting link integrity, fiber optic or twisted pair, has made a valid connection (link) to this port.

**Table 4-1. CyberSWITCH 200 Series and 400 Events and Alarms (Continued)**

<b>Message in the Event Log</b>	<b>Alarm Manager Probable Cause Message</b>
<b>CsEvFormat/Event000d0104</b>  {d "%w- %d %m-, %Y - %T"} - Network configuration change reported by {m} ({t}). Device previously linked to port {I 3} on module in slot {I 1} has ceased to transmit link integrity pulse. (event [{e}])	<b>CsPCause/Prob000d0104</b>  A device previously linked with this port has been removed, powered down, or the cable segment has a fault.
<b>CsEvFormat/Event000d0105</b>  {d "%w- %d %m-, %Y - %T"} - New source address {X 5}, is detected on {m} ({t}), port {I 3} of module in slot {I 1}. (event [{e}])	<b>CsPCause/Prob000d0105</b>  A device, previously linked or not, has transmitted a packet that was received on this port. The device is either new or has been powered up but not transmitted a packet with the aging time period.
<b>CsEvFormat/Event000d0106</b>  {d "%w- %d %m-, %Y - %T"} - Source address {X 5}, has timed out on port {I 3} of the module in slot {I 1} of {m} ({t}). (event [{e}])	<b>CsPCause/Prob000d0106</b>  A device linked or not linked to this port has not transmitted a packet during the aging time period, and has been removed from the source address table of the device.
<b>CsEvFormat/Event000d0107</b>  {d "%w- %d %m-, %Y - %T"} - Device configuration change reported by {m} ({t}). The module in slot {I 1} has been removed. (event [{e}])	<b>CsPCause/Prob000d0107</b>  A module within this hub has been removed or has failed.
<b>CsEvFormat/Event000d0108</b>  {d "%w- %d %m-, %Y - %T"} - Device configuration change reported by {m} ({t}), An (EPIM) has been inserted into slot {I 1} of the MMAC. (event [{e}])	<b>CsPCause/Prob000d0108</b>  A module has been inserted into this hub.
<b>CsEvFormat/Event000d010a</b>  {d "%w- %d %m-, %Y - %T"} - Network configuration change reported by {m} ({t}). Port {I 3} in slot {I 1} has now become active as the result of a redundancy poll failure. (event [{e}])	<b>CsPCause/Prob000d010a</b>  The polled device has been communicated with via a backup port and the port is now active. The other ports in this redundant circuit are now designated as backup and are turned off to prevent data loops on the network.

**Table 4-1. CyberSWITCH 200 Series and 400 Events and Alarms (Continued)**

<b>Message in the Event Log</b>	<b>Alarm Manager Probable Cause Message</b>
<b>CsEvFormat/Event000d010b</b>  {d "%w- %d %m-, %Y - %T"} - Redundancy diagnostics of {m} ({t}), indicate that the redundant link for module {I 1}, port {I 3} has failed. (event [{e}])	<b>CsPCause/Prob000d010b</b>  The cable segment connected to the port has a cable fault. This should be checked for continuity as soon as possible in case the other ports in this redundant circuit fail and this port is needed.
<b>CsEvFormat/Event000d010f</b>  {d "%w- %d %m-, %Y - %T"} - User defined traffic threshold - {I 1} packets within {I 3} seconds, exceeded on module {I 5} of {m} ({t}). (event [{e}])	<b>CsPCause/Prob000d010f</b>  The packet rate on this module has exceeded user defined limits. The device(s) attached to this module may have an application which requires a large amount of network bandwidth. If the application requires a large amount of bandwidth, a bridge or router could be used to logically separate various network segments. Use port level thresholds to further troubleshoot to a device level.
<b>CsEvFormat/Event000d0110</b>  {d "%w- %d %m-, %Y - %T"} - Error threshold exceeded. An error threshold, of {I 1}% of total packets in {I 5} seconds, exceeded on module in slot {I 7}. (event [{e}])	<b>CsPCause/Prob000d0110</b>  This threshold will indicate that a malfunctioning device is present on this module or that a cable fault exists. A port level threshold should be set to further troubleshoot to the offending node.
<b>CsEvFormat/Event000d0111</b>  {d "%w- %d %m-, %Y - %T"} - Collision threshold exceeded. The number of collisions per total packets within the time base of {I 3} seconds has been exceeded on the module in slot {I 5} of {m} ({t}). (event [{e}])	<b>CsPCause/Prob000d0111</b>  Collisions are caused by many nodes contending for the network or cabling faults. Use port level thresholds to further troubleshoot to a device level.
<b>CsEvFormat/Event000d0112</b>  {d "%w- %d %m-, %Y - %T"} - Traffic threshold, {I 1} packets per {I 3} seconds, exceeded on port {I 7} on module in slot {I 5} of {m} ({t}). (event [{e}])	<b>CsPCause/Prob000d0112</b>  The device(s) attached to this port may have an application which requires a large amount of network bandwidth. If the application requires a large amount of bandwidth, a bridge or router could be used to logically separate various network segments.



**Table 4-1. CyberSWITCH 200 Series and 400 Events and Alarms (Continued)**

<b>Message in the Event Log</b>	<b>Alarm Manager Probable Cause Message</b>
<b>CsEvFormat/Event000d0113</b>  {d "%w- %d %m-, %Y - %T"} - Error threshold exceeded. An error threshold, of {I 1}% of total packets in {I 5} seconds, exceeded on port {I 9} on module in slot {I 7} of {m} ({t}). (event [{e}])	<b>CsPCause/Prob000d0113</b>  The device(s) attached to this port could have a hardware failure where it transmits invalid packets, or the cable segment attached to this port may have a problem. Check cable for loose connection or continuity problems.
<b>CsEvFormat/Event000d0114</b>  {d "%w- %d %m-, %Y - %T"} - Collision threshold exceeded. The number of collisions per total packets within the time base of {I 3} seconds has been exceeded on port {I 7} on module in slot {I 5} of {m} ({t}). (event [{e}])	<b>CsPCause/Prob000d0114</b>  The device(s) attached to this port may have an adapter card problem which causes them to transmit without regarding network availability, or a cable problem may exist. Check adapter card and cable for loose connections, termination problems, or improper pinouts.
<b>CsEvFormat/Event000d0115</b>  {d "%w- %d %m-, %Y - %T"} - Port Topology type changed. Port {I 3} of module in slot {I 1} has changed from {T PrtTopoStatus 5} port on {m} ({t}). (event [{e}])	<b>CsPCause/Prob000d0115</b>  The number of addresses in the source address table has changed. If three or more addresses are learned on a port for one aging time period, the port is designated as a trunk port. A port connecting two hubs or a coax segment with multiple taps are examples of trunk ports. If a port has one address in the source address table for one aging time, the port is designated as a station port. An example of a station port would be a twisted pair "home run" to a PC.
<b>CsEvFormat/Event000d0117</b>  {d "%w- %d %m-, %Y - %T"} - Port security violation has occurred, MAC address {X 5} has been detected on port {I 3} of module in slot {I 1} of {m} ({t}). (event [{e}])	<b>CsPCause/Prob000d0117</b>  This event is only generated when the hub has port locking enabled. When a hub is locked, the source MAC addresses are learned on each port. When a port detects an attached device has changed its address, the device will note that the new address is not in the source address table. This will disable and lock the port, which then transmits this trap. This trap would be generated if an adapter were replaced or if an intruder attempted to access the network.

**Table 4-1. CyberSWITCH 200 Series and 400 Events and Alarms (Continued)**

<b>Message in the Event Log</b>	<b>Alarm Manager Probable Cause Message</b>
<b>CsEvFormat/Event000d0118</b>  {d "%w- %d %m-, %Y - %T"} - Port violation reset, port {I 3} of module in slot {I 1} of {m} ({t}). (event [{e}])	<b>CsPCause/Prob000d0118</b>  The network administrator has located the offending device that caused the port violation, and has re-enabled the port for use by the original network address for that port.
<b>CsEvFormat/Event000d0119</b>  {d "%w- %d %m-, %Y - %T"} - Environment Temperature Warm condition for module in slot {I 1} reported by {m} ({t}). (event [{e}])	<b>CsPCause/Prob000d0119</b>  The module may be defective or a fan has failed in the chassis. Check the alarm log for this device for any fan alarms.
<b>CsEvFormat/Event000d011a</b>  {d "%w- %d %m-, %Y - %T"} - Environment Temperature Hot condition for module in slot {I 1} reported by {m} ({t}). (event [{e}])	<b>CsPCause/Prob000d011a</b>  A module may be defective or a fan has failed in the chassis. This alarm indicates a serious heat condition and should be addressed immediately.
<b>CsEvFormat/Event000d011b</b>  {d "%w- %d %m-, %Y - %T"} - Environment Voltage Low condition has been detected by power supply in slot {I 1} of {m} ({t}). (event [{e}])	<b>CsPCause/Prob000d011b</b>  The internal voltage of the power supply module is low. The voltage low condition indicates that either the supply itself is defective or an AC power failure has occurred into the power supply module.
<b>CsEvFormat/Event000d011c</b>  {d "%w- %d %m-, %Y - %T"} - Environment Temperature Normal condition for module in slot {I 1} reported by {m} ({t}). (event [{e}])	<b>CsPCause/Prob000d011c</b>  A chassis or cooling system problem at this device's location has been corrected.
<b>CsEvFormat/Event000d011d</b>  {d "%w- %d %m-, %Y - %T"} - Environment Voltage Normal condition has been detected by power supply in slot {I 1} of {m} ({t}). (event [{e}])	<b>CsPCause/Prob000d011d</b>  The problem with the power supply module or AC power feed has been corrected and the unit is now functioning normally.

**Table 4-1. CyberSWITCH 200 Series and 400 Events and Alarms (Continued)**

<b>Message in the Event Log</b>	<b>Alarm Manager Probable Cause Message</b>
<b>CsEvFormat/Event000d011e</b>  {d "%w- %d %m-, %Y - %T"} - A fan in the system's chassis has failed or is operating at an abnormal RPM rate, has been detected by {m} ({t}). (event [{e}])	<b>CsPCause/Prob000d011e</b>  Either one or more fans in the fan tray assembly have failed, or the fan tray has been removed. The situation is not critical, but temperature warm and temperature hot traps may follow. If the temperature traps have appeared in the alarm log, the failure should be addressed before overheating damages the device.
<b>CsEvFormat/Event000d011f</b>  {d "%w- %d %m-, %Y - %T"} - A fan in the system's chassis has resumed normal operation, has been detected by {m} ({t}). (event [{e}])	<b>CsPCause/Prob000d011f</b>  The problem previously detected with the fan assembly has been corrected and the unit is now functioning normally.
<b>CsEvFormat/Event000d0121</b>  {d "%w- %d %m-, %Y - %T"} - Broadcast threshold exceeded {I 1} total packets in {I 3} seconds on the module in slot {I 5} of {m} ({t}). (event [{e}])	<b>CsPCause/Prob000d0121</b>  <b>MODULE BROADCAST THRESHOLD EXCEEDED</b>  This trap will be generated when the broadcast (packets per time interval) has been exceeded for the given module.
<b>CsEvFormat/Event000d0122</b>  {d "%w- %d %m-, %Y - %T"} - Broadcast threshold exceeded {I 1} total packets in {I 3} seconds on port {I 7} on the module in slot {I 5} of {m} ({t}). (event [{e}])	<b>CsPCause/Prob000d0122</b>  <b>PORT BROADCAST THRESHOLD EXCEEDED</b>  This trap will be generated when the broadcast (packets per time interval) has been exceeded for the given port.
<b>CsEvFormat/Event000d0125</b>  {d "%w- %d %m-, %Y - %T"} - System Voltage Low condition has been detected by {m} ({t}). (event [{e}])	<b>CsPCause/Prob000d0125</b>  The internal 5 volt line of the system is low. The voltage low condition indicates that either the power supplies are failing or there is not enough power available to the host modules. This is a serious condition and should be addressed immediately.
<b>CsEvFormat/Event000d0126</b>  {d "%w- %d %m-, %Y - %T"} - System Voltage Normal condition has been detected by {m} ({t}). (event [{e}])	<b>CsPCause/Prob000d0126</b>  The problem with the internal 5 volt line of the system has been corrected. The system voltage condition has returned to normal.

**Table 4-1. CyberSWITCH 200 Series and 400 Events and Alarms (Continued)**

<b>Message in the Event Log</b>	<b>Alarm Manager Probable Cause Message</b>
<b>CsEvFormat/Event000d0127</b>  {d "%w- %d %m-, %Y - %T"} - An EPIM has been removed from port {I 3} on module in slot {I 1} of {m} ({t}). (event [{e}])	<b>CsPCause/Prob000d0127</b>  An Ethernet Port Interface Module (EPIM) has been physically removed.
<b>CsEvFormat/Event000d0128</b>  {d "%w- %d %m-, %Y - %T"} - An (EPIM) has been inserted into port {I 3} on module in slot {I 1} of {m} ({t}). (event [{e}])	<b>CsPCause/Prob000d0128</b>  An Ethernet Port Interface Module (EPIM) has been physically inserted.
<b>CsEvFormat/Event000d0129</b>  {d "%w- %d %m-, %Y - %T"} - Traffic threshold, {I 1} packets per {I 3} seconds, exceeded on the repeater network {I 5} of {m} ({t}). (event [{e}])	<b>CsPCause/Prob000d0129</b>  The device(s) attached to this channel may have an application level problem. The attached devices may be operating properly, but the application requires a large amount of network bandwidth. If the application requires a large amount of bandwidth, a bridge or router may be used to logically separate various network segments. This trap indicates that module or port level thresholds on this repeater channel are needed to pinpoint high bandwidth users.
<b>CsEvFormat/Event000d0130</b>  {d "%w- %d %m-, %Y - %T"} - Error threshold exceeded. An error threshold, of {I 1}% total packets in {I 5} seconds, exceeded on repeater network {I 7} of {m} ({t}). (event [{e}])	<b>CsPCause/Prob000d0130</b>  A user defined threshold has been exceeded on this channel. This threshold could indicate that a malfunctioning device is present on this channel or that a cable fault exists. A module or port level threshold should be set to further troubleshoot to the offending node.

**Table 4-1. CyberSWITCH 200 Series and 400 Events and Alarms (Continued)**

<b>Message in the Event Log</b>	<b>Alarm Manager Probable Cause Message</b>
<b>CsEvFormat/Event000d0131</b>  {d "%w- %d %m-, %Y - %T"} - Collision threshold exceeded. The number of collisions per total packets within the time base of {I 3} seconds has been exceeded on repeater network {I 5} of {m} ({t}). (event [{e}])	<b>CsPCause/Prob000d0131</b>  A user defined threshold has been exceeded on this channel. This threshold could indicate that a malfunctioning device is present on this channel, or that a cable fault exists. Collisions are usually caused by many nodes contending for the network. As traffic rates increase, the collision rate usually follows. Therefore, if this channel has a high bandwidth utilization, a high collision rate is not unlikely. Use module and port level thresholds to further troubleshoot to a device level.
<b>CsEvFormat/Event000d0132</b>  {d "%w- %d %m-, %Y - %T"} - Network port security is {T LockStatus 1} on repeater network {I 3} of {m} ({t}). (event [{e}])	<b>CsPCause/Prob000d0132</b>  The network administrator has changed the status of port locking for this repeater channel. The security feature locks all ports on this repeater channel so that only a valid user already in the source address table can access the network.
<b>CsEvFormat/Event000d0133</b>  {d "%w- %d %m-, %Y - %T"} - Broadcast threshold exceeded {I 1} total packets in {I 3} seconds on repeater network {I 5} of {m} ({t}). (event [{e}])	<b>CsPCause/Prob000d0133</b>  <b>REPEATER BROADCAST THRESHOLD EXCEEDED</b>  This trap will be generated when the broadcast (packets per time interval) has been exceeded for the repeater.
<b>CsEvFormat/Event000d0135</b>  {d "%w- %d %m-, %Y - %T"} - Port Security Status is {T LockStatus 3} for port #{I 2}, located in port group #{I 1} of {m} ({t}). (event [{e}])	<b>CsPCause/Prob000d0135</b>  <b>PORT SECURITY STATUS</b>  This alarm is generated when a change in the lock status for a particular port occurs.
<b>CsEvFormat/Event000d0136</b>  {d "%w- %d %m-, %Y - %T"} - Device configuration change reported by {m} ({t}). A module has been inserted into slot {I 1}. (event [{e}])	<b>CsPCause/Prob000d0136</b>  A module has been inserted into this hub.

**Table 4-1. CyberSWITCH 200 Series and 400 Events and Alarms (Continued)**

<b>Message in the Event Log</b>	<b>Alarm Manager Probable Cause Message</b>
<b>CsEvFormat/Event000d0137</b>  {d "%w- %d %m-, %Y - %T"} Alternate Path Repeater Management has been enabled for {m} of type {t} Network Address Synchronized to {O 1}. - (event [{e}])	<b>CsPCause/Prob000d0137</b>  ALTERNATE PATH REPEATER MANAGEMENT HAS BEEN ENABLED  PROBABLE CAUSE:  Alternate Path Repeater Management functionality has been enabled for this repeater model.  RECOMMENDED ACTIONS:  1) Check event log to obtain newly synchronized Network address.  2) If repeater model is not associated with a routing device this functionality should be disabled.
<b>CsEvFormat/Event000d0138</b>  {d "%w- %d %m-, %Y - %T"} Alternate Path Repeater Management has been enabled for {m} of type {t} No Network Address Synchronization. - (event [{e}])	<b>CsPCause/Prob000d0138</b>  ALTERNATE PATH REPEATER MANAGEMENT HAS BEEN ENABLED  PROBABLE CAUSE:  Alternate Path Repeater Management functionality has been enabled for this repeater model.  RECOMMENDED ACTIONS:  Check the device's network address. The repeater model was unable to synchronize to the device's network address.

**Table 4-1. CyberSWITCH 200 Series and 400 Events and Alarms (Continued)**

<b>Message in the Event Log</b>	<b>Alarm Manager Probable Cause Message</b>
<b>CsEvFormat/Event000d0139</b>  {d "%w- %d %m-, %Y - %T"} Alternate Path Repeater Management has been disabled for {m} of type {t} Network Address Synchronized to {O 1}. - (event [{e}])	<b>CsPCause/Prob000d0139</b>  ALTERNATE PATH REPEATER MANAGEMENT HAS BEEN DISABLED  PROBABLE CAUSE:  Alternate Path Repeater Management functionality has been disabled for this repeater model.  RECOMMENDED ACTIONS:  1) If associated with a routing device, re-enable functionality to provide management path redundancy.  2) Make sure the newly synchronized network address is accessible.
<b>CsEvFormat/Event000d013a</b>  {d "%w- %d %m-, %Y - %T"} Alternate Path Repeater Management has been disabled for {m} of type {t} No Network Address Synchronization. - (event [{e}])	<b>CsPCause/Prob000d013a</b>  ALTERNATE PATH REPEATER MANAGEMENT HAS BEEN DISABLED  PROBABLE CAUSE:  Alternate Path Repeater Management functionality has been disabled for this repeater model.  RECOMMENDED ACTIONS:  1) If associated with a routing device re-enable functionality to provide management path redundancy.  2) No address resynchronization could take place. Check for existence of original interface IP address.

**Table 4-1. CyberSWITCH 200 Series and 400 Events and Alarms (Continued)**

<b>Message in the Event Log</b>	<b>Alarm Manager Probable Cause Message</b>
<b>CsEvFormat/Event000d013b</b>  {d "%w- %d %m-, %Y - %T"} Alternate Path Repeater Management has activated for {m} of type {t} Network Address changed from {O 1} to {O 2}. - (event [{e}])	<b>CsPCause/Prob000d013b</b>  ALTERNATE PATH REPEATER MANAGEMENT ACTIVATED  PROBABLE CAUSE:  Router Redundancy for the managing device model has probably activated.  RECOMMENDED ACTIONS:  1) Refer to event log for current IP address used for modeling.  2) Check the subnet and address that was previously being used to model the associated device.
<b>CsEvFormat/Event000d1139</b>  {d "%w- %d %m-, %Y - %T"} - Port Security Status is {T SecureState 3} for port #{I 2}, located in port group #{I 1} of {m} ({t}). (event [{e}])	<b>CsPCause/Prob000d1139</b>  Secured State Change  This alarm is generated when the status of the secure state changes for a specific port.
<b>CsEvFormat/Event000d113a</b>  {d "%w- %d %m-, %Y - %T"} - Network Learning Status is {T LearnState 2} for the network interface #{I 1} of {m} ({t}). (event [{e}])	<b>CsPCause/Prob000d113a</b>  Network Learn State  This alarm is generated when network learning is reset. When learning is reset, all secure addresses on each port, within the network, will be deleted and ports will learn source addresses again.
<b>CsEvFormat/Event000d113b</b>  {d "%w- %d %m-, %Y - %T"} - Port Group Learning Status is {T LearnState 2} for the port group #{I 1} of {m} ({t}). (event [{e}])	<b>CsPCause/Prob000d113b</b>  Port Group Learn State  This alarm is generated when a port group's learning is reset. When learning is reset, all secure addresses on each port, within a port group, will be deleted and ports will learn source addresses again.



**Table 4-1. CyberSWITCH 200 Series and 400 Events and Alarms (Continued)**

<b>Message in the Event Log</b>	<b>Alarm Manager Probable Cause Message</b>
<b>CsEvFormat/Event000d113c</b>  {d "%w- %d %m-, %Y - %T"} - Port Learning Status is {T LearnState 3} for the port #{I 2}, located in port group {I 1} of {m} ({t}). (event [{e}])	<b>CsPCause/Prob000d113c</b>  Port Learn State  This alarm is generated when a port's learning is reset. When learning is reset, all secure addresses on the port will be deleted and the port will learn source addresses again.
<b>CsEvFormat/Event000d113d</b>  {d "%w- %d %m-, %Y - %T"} - Network Learning Mode is {T LearnMode 2} for the network interface #{I 1} of {m} ({t}). (event [{e}])	<b>CsPCause/Prob000d113d</b>  Network Learn Mode  This alarm is generated when network learning mode is changed between one-time learn mode and continuous learn mode.
<b>CsEvFormat/Event000d113e</b>  {d "%w- %d %m-, %Y - %T"} - Port Group Learning Mode is {T LearnMode 2} for the port group #{I 1} of {m} ({t}). (event [{e}])	<b>CsPCause/Prob000d113e</b>  Port Group Learn Mode  This alarm is generated when a port group's learning mode is changed between one-time learn mode and continuous learn mode.
<b>CsEvFormat/Event000d113f</b>  {d "%w- %d %m-, %Y - %T"} - Port Learning Mode is {T LearnMode 3} for the port #{I 2}, located in port group {I 1} of {m} ({t}). (event [{e}])	<b>CsPCause/Prob000d113f</b>  Port Learn Mode  This alarm is generated when a port's learning mode is changed between one-time learn mode and continuous learn mode.
<b>CsEvFormat/Event00830000</b>  {d "%w- %d %m-, %Y - %T"} DLM LostContact trap for Destination Address {O 1}, Owner Address {O 2} from {t} device, named {m}. (event [{e}])	<b>No Probable Cause Message</b>

**Table 4-1. CyberSWITCH 200 Series and 400 Events and Alarms (Continued)**

<b>Message in the Event Log</b>	<b>Alarm Manager Probable Cause Message</b>
<b>CsEvFormat/Event00830001</b>  {d "%w- %d %m-, %Y - %T"} DLM Threshold Trap for Destination Address {O 1}, Owner {O 2}, OID sequence {I 3}, OID Object {O 4} from {t} device, named {m}. (event [{e}])	<b>No Probable Cause Message</b>
<b>CsEvFormat/Event00830002</b>  {d "%w- %d %m-, %Y - %T"} DLM ReestabContact Trap for Destination Address {O 1}, Owner Address {O 2} from {t} device, named {m}. (event [{e}])	<b>No Probable Cause Message</b>





# Chapter 5

## Application View

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### What Is in This Chapter

This chapter describes the following device-specific applications for the CyberSWITCH Devices (CSX200 Series and CSX400):

- [\*DownLoad Application\*](#)
- [\*Ethernet 1 Application - for CSX200 Series only\*](#)

The Application view allows you to access increasingly detailed views of network information for the applications supported by this device.

### Common Applications

These devices support the following common applications which are described in the ***Application View Reference***:

- Bridging (CSIBridge)
  - Enet SDB (Ct\_BdgEnet\_App)
  - PPP\_Bridge (PPP\_BdgApp1474)
  - Spanning Tree (Ct\_Stp\_App)
  - Static (Static\_App)
  - Transparent (Transparnt\_App)
- MIB-II (SNMP2\_Agent)
  - ICMP (ICMP\_App)
  - IP (IP2\_App)
  - System (System2\_App)
  - UDP (UDP2\_App)
- PPP (PPP\_LCPApp1471)

- RS-232 (CtWANAppRS232)
  - RS-232sync (RFC1317sync)
- WAN (CtWANApp)
- DS1 (CtWANAppDS1)
- Frame Relay (rfc1315App)

These devices also support the following major applications which are described in their management module guides:

- CtRouter (CtRouterApp) described in the ***Routing Services Management Module Guide***
  - IP Routing (CtIP2App)
  - IPX Routing (CtIpxApp)
  - IP RIP (CtIpRipApp)
  - IPX RIP (CtIpxRipApp)
  - IPX SAP (CtIpxSapApp)

## Device Application View

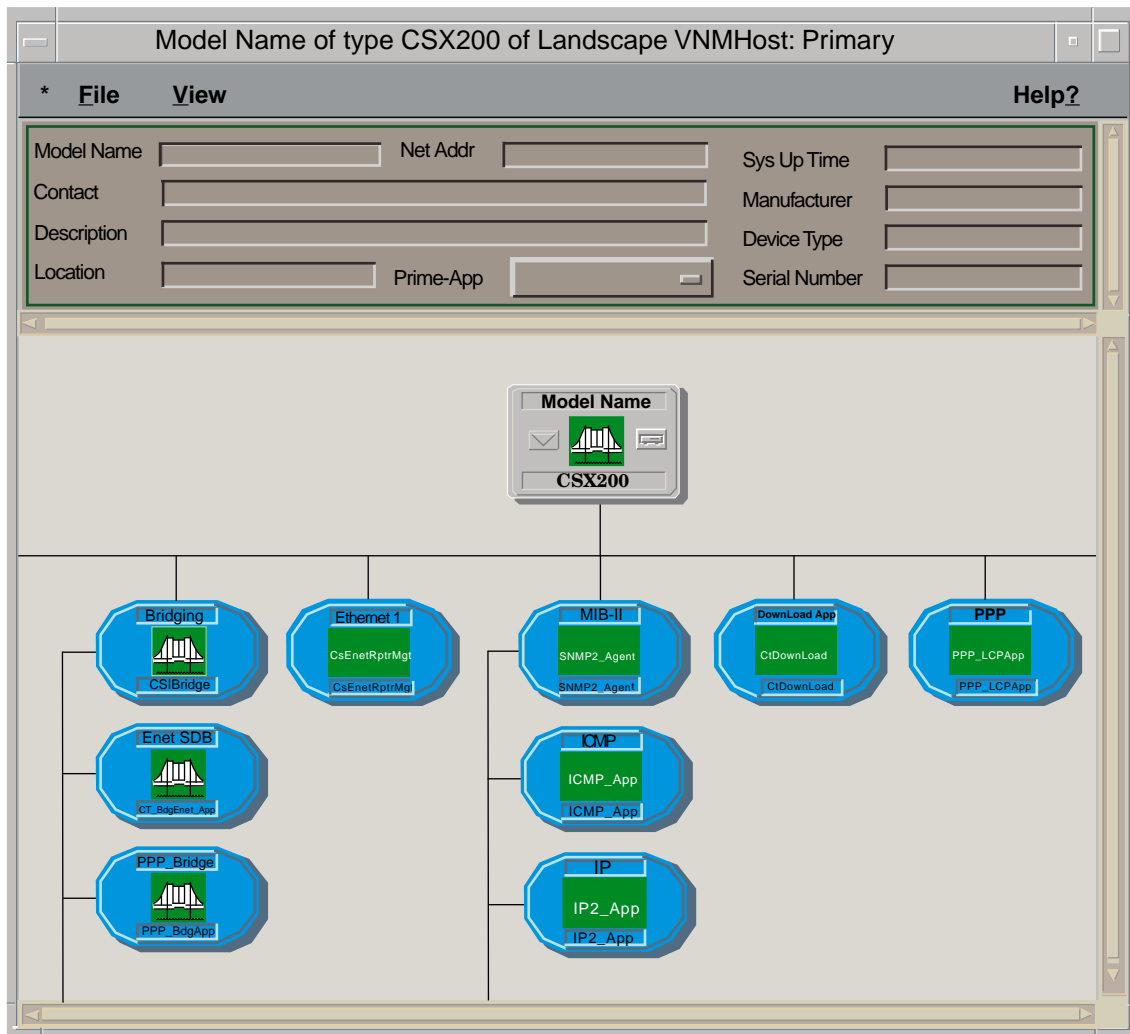
This view (accessible from the device icon) shows the common and device-specific applications supported by these devices and provides access to application-specific information.

See Chapter 1, [Introduction](#), for information on [Accessing SPECTRUM Views](#).

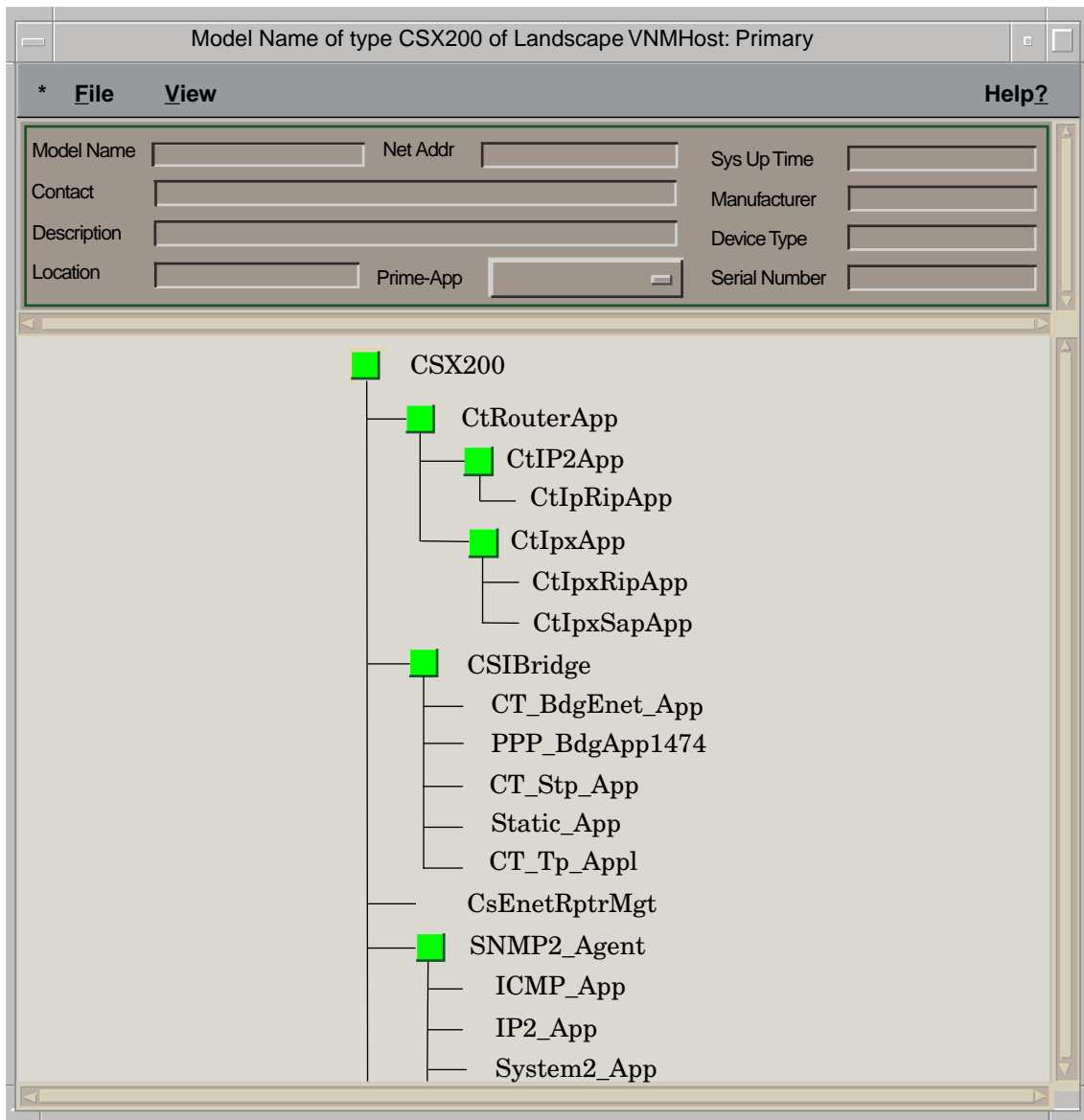
[Figure 5-1](#) shows an example of an Application view in the icon mode.

[Figure 5-2](#) shows an example of an Application view in the list mode.

To change the display mode, from the View menu, select **Mode -> List** or **Icon**.

**Figure 5-1. Device Application View (Icon Mode)**

**Figure 5-2. Device Application View (List Mode)**



## Download Application

This application provides download functionality for these devices. The application type name for this application is CtDownloadApp. To access the Download Application view, do the following:

1. Within the Application view, highlight the CtDownloadApp icon (icon mode) or application name (list mode).
2. From the Icon Subviews menu, select **Download Application**.

The Download Application is an SPMA view which is described in the ***SPECTRUM Portable Management Application Tools Guide***.

## Ethernet 1 Application - for CSX200 Series only

This application provides repeater and management functionality for this device. The application type name for this application is CsEnetRpnrMgt.

[Table 5-1](#) describes each of the Icon Subviews menu selections available through this application.

**Table 5-1. Ethernet 1 Application Icon Subviews Menu**

Menu Selection	Description
DevTop	Opens the Device Topology view described in the <i><b>Operator's Reference</b></i> .
Acknowledge	Acknowledges a status change for an icon; stops flashing color.
Configuration	Opens the <i>Repeater Configuration View - for the CSX200 Series only</i> described on Page 3-5.
Model Information	Opens the Repeater Model Information view described in the <i><b>Operator's Reference</b></i> .







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